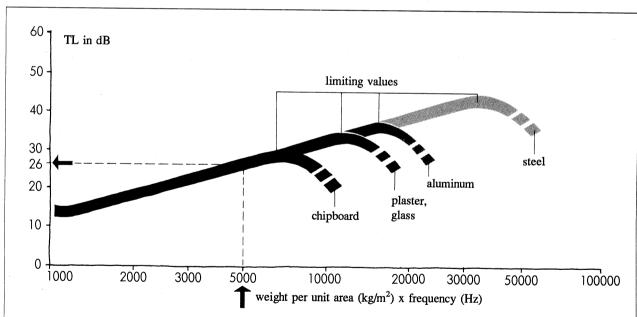
THE TL OF A SINGLE WALL IS ESTIMATED FROM ITS SURFACE WEIGHT

Transmission loss (TL) is a measure of a wall's ability to reduce a sound level. At low frequencies and small wall thicknesses, the surface weight in kg/m² determines the difference in level between incident and transmitted sound. If the thickness or the frequency are increased, a limit will be reached which depends on the wall material.

Principle



Example: What TL will be provided by a 15 mm thick chipboard panel at 500 Hz? The panel weighs 10 kg/m^2 . Solution: $10 \times 500 = 5000$. Thus, the TL will amount to about 26 dB.

Application with a thin screen.

Example

A sand blast operation creates excessive noise.

Control Measure

A separate room is constructed for the ventilation fan and other auxiliary equipment. The blasting equipment is separated from other work areas with a drapery of lead—rubber fabric, which is heavy but flexible.

